

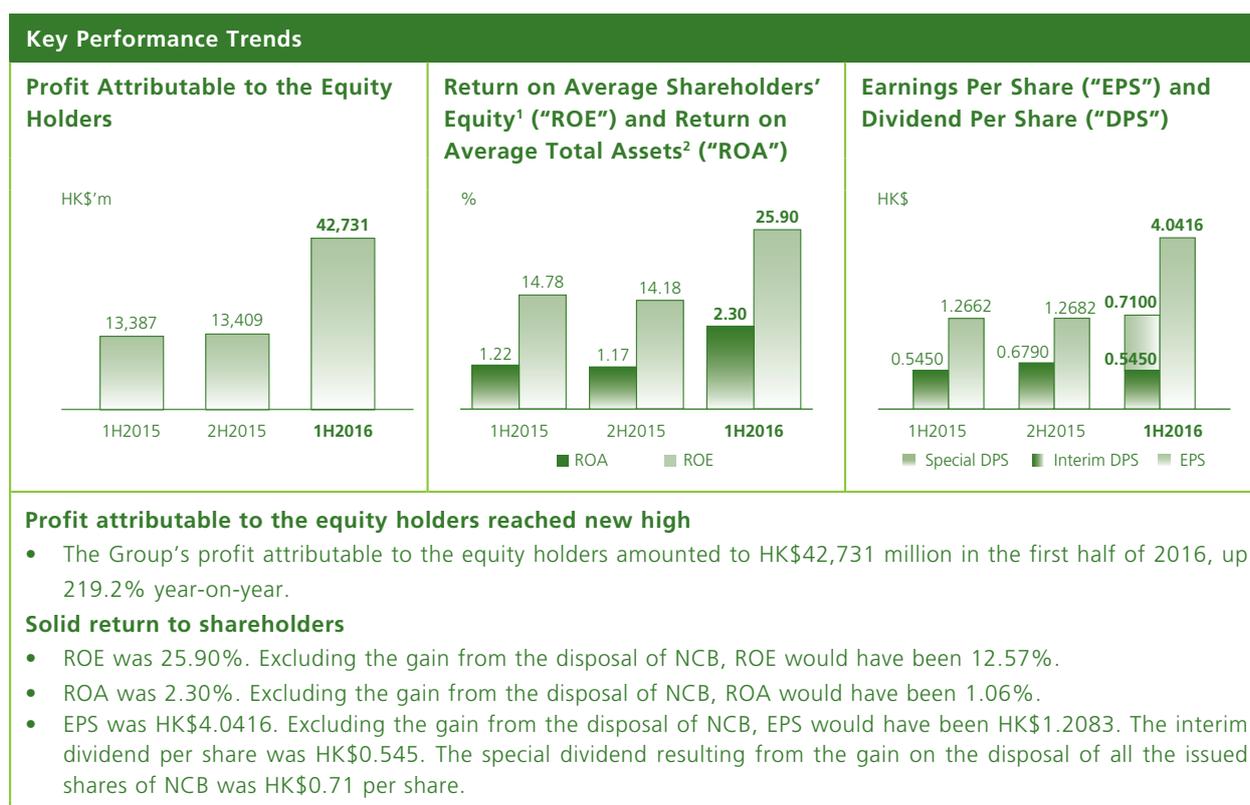
# MANAGEMENT'S DISCUSSION AND ANALYSIS

In the first half of 2016, the Group captured development opportunities from the market and achieved a record high in its financial results. With the disposal of NCB and the satisfactory operating performance, profit attributable to the equity holders increased strongly to HK\$42,731 million, up 2.2 times year-on-year, a new high since the Group's listing. Total capital ratio also rose strongly. The Group made good progress in its regional transformation, succeeded in capturing opportunities from the implementation of China's important strategies, including the Belt and Road initiative and RMB internationalisation, and expanded its businesses across the ASEAN region. With the Group's focus on expanding its customer base and proactive management of assets and liabilities, growth in customer deposits and advances to customers outperformed the market with a further improvement in deposit structure. It drove solid business growth in the local market, being the top mandated arranger in the Hong Kong-Macau syndicated loan market and maintained its market leadership in new residential mortgage loans in Hong Kong. At the same time, the Group accelerated the development of its diversified business platforms and made innovative development in Internet finance. It also proactively expanded mobile finance and strengthened its service capabilities of e-Channels. In July, the branch network transformation project was fully implemented to enhance customer experience and service capabilities. The Group continued to adopt prudent risk management to ensure the solid and sustainable business development.

## FINANCIAL PERFORMANCE AND CONDITION AT A GLANCE

As a result of the Group's disposal of NCB, the Group reported the operating results of NCB as discontinued operations in the condensed consolidated income statement with comparative information restated. Assets and liabilities of NCB as at 31 December 2015 were presented separately as assets held for sale and liabilities associated with assets held for sale in the condensed consolidated balance sheet. As a result, to facilitate a year-on-year comparison, comparative information for 2015 is restated and analysed in this Management's Discussion and Analysis.

The following chart is a summary of the Group's key financial results for the first half of 2016 in comparison with the previous two half-yearly periods. The average value of the liquidity coverage ratio is reported on a quarterly basis.



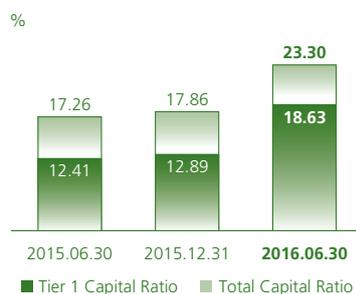
# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Financial Position

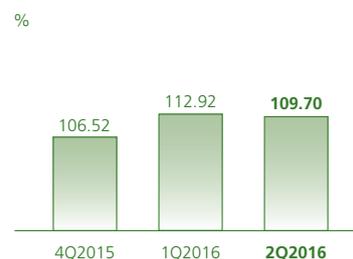
### Loan to Deposit Ratio<sup>3</sup>



### Capital Ratio<sup>4</sup>



### Average value of Liquidity Coverage Ratio<sup>5</sup>



### Loan to deposit ratio at a healthy level

- Advances to customers and deposits from customers grew by 11.1% and 4.7% respectively from the end of 2015, outperforming the market growth. The loan to deposit ratio was 67.10%, up 3.85 percentage points from 63.25% at the end of 2015.

### Solid capital position to support business growth

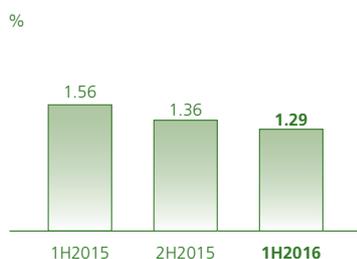
- The total capital ratio was 23.30% while the Tier 1 capital ratio was 18.63%, up 5.44 and 5.74 percentage points from that at the end of 2015. The improvements mainly reflect the gain on disposal of NCB.

### Stable liquidity position

- The average value of the liquidity coverage ratio in the first and second quarter of 2016 was 112.92% and 109.70% respectively, well above the regulatory requirement.

## Key Operating Ratios

### Net Interest Margin ("NIM")



### Cost to Income Ratio



### Classified or Impaired Loan Ratio<sup>6</sup>



### Narrowing NIM with expanded asset size

- NIM was 1.29%, down 27 basis points year-on-year, mainly attributable to the lower average interest spread of RMB business, caused by the decline in RMB market interest rates, the lower long-term interest rates versus short-term interest rates in the first quarter, and the increase of RMB funds from the clearing bank business. NIM was down 7 basis points half-on-half, with the decline slowing down.

### Cost to income ratio at a low level

- The cost to income ratio for continuing operations was 28.05%, up 1.50 percentage points year-on-year, a relatively low level in the industry.

### Classified or impaired loan ratio stayed at a low level

- The classified or impaired loan ratio remained low at 0.25%.

1. Return on Average Shareholders' Equity as defined in "Financial Highlights".

2. Return on Average Total Assets as defined in "Financial Highlights".

3. Loan represents gross advances to customers while deposits from customers include structured deposits reported as "Financial liabilities at fair value through profit or loss".

4. The capital ratios are computed on a consolidated basis for regulatory purposes, comprising the positions of BOCHK and certain subsidiaries specified by the HKMA in accordance with the Banking (Capital) Rules.

5. The average value of the liquidity coverage ratio is calculated based on the arithmetic mean of the liquidity coverage ratio as at the end of each working day in the quarter and is computed on a consolidated basis, which comprises the positions of BOCHK and certain subsidiaries specified by the HKMA in accordance with the Banking (Liquidity) Rules.

6. Classified or impaired loans represent advances which are either classified as "substandard", "doubtful" or "loss" under the Group's classification of loan quality, or individually assessed to be impaired.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## ECONOMIC BACKGROUND AND OPERATING ENVIRONMENT

In the first half of 2016, the global economy continued to grow modestly but global financial market volatilities heightened as markets plummeted at the beginning of the year amid concerns of global economic conditions and fears of reversal of liquidity support. The markets soon stabilised before tumbling again after the United Kingdom voted to leave the European Union in the Brexit referendum. As a result, the global economy entered into a period of profound political, economic and financial uncertainty. In the US, despite a slowdown in GDP growth, the recovery stayed on track with a low unemployment rate and solid residential property market. The accommodative monetary environment continued to provide support to the economic improvement in the Eurozone but the recovery remained fragile and could be held back by the Brexit aftershock. In the Mainland of China, growth momentum eased slightly amid weakened external demand and its own economic restructuring which was still underway with slowdowns in industrial production, investment and consumption.

The Hong Kong economy slowed further in the first half of 2016 with a mere real GDP growth of 1.2% over the previous year. The global and Mainland economic slowdown and recent asset market corrections gradually weakened economic sentiment and adversely affected domestic demand. The continuous slowdown in inbound tourism also created a drag on retail sales. In the first half of 2016, the local residential property market stayed quiet, with a decline in property prices and a slowdown in transaction volume. The local stock market retreated with transaction volumes decreasing significantly year-on-year.

Overall liquidity in the Hong Kong banking sector remained abundant, and market interest rates continued at low levels with increased volatilities compared to previous years. The average 1-month HIBOR and 1-month LIBOR rose from 0.24% and 0.18% respectively in the first half of 2015 to 0.25% and 0.44% respectively in

the first half of 2016. Meanwhile, the average 10-year HKD swap rate and USD swap rate fell from 1.98% and 2.16% respectively to 1.75% and 1.69% respectively over the same period.

In the first half of 2016, the offshore RMB business in Hong Kong continued to grow. A number of initiatives were introduced to promote capital account convertibility and the internationalisation of the RMB. There was relaxation of policies on Free Trade Zones; to allow foreign entities to issue Panda bonds; and to participate in the Mainland's interbank bond market as well as the interbank foreign exchange market. During the period, the People's Bank of China ("PBOC") further refined the reserve requirement regime by charging a reserve requirement ratio for RMB deposits held by offshore participating banks. In addition, the PBOC allowed Hong Kong's RMB clearing bank to join China's Cross-border Interbank Payment System ("CIPS"). All of these initiatives will promote the healthy and steady development of the offshore RMB market.

Banks in Hong Kong continued to operate in a highly challenging environment in the first half of 2016. The global economic slowdown, the economic restructuring in the Mainland and corrections in the Hong Kong residential property market further dampened already softened loan demand and negatively affected certain industries, which put pressure on asset quality. Amid the slow pace of US interest rate hikes, banks continued to operate at low market interest rates with intense market competition. Additionally, the depreciation of the RMB resulted in a decrease in offshore RMB deposits in Hong Kong. Nevertheless, there were also opportunities for banks, especially those arising from the implementation of the Mainland's important strategies, including the Belt and Road initiative, RMB internationalisation, and the Going Global Strategy. The Mainland-Hong Kong Mutual Recognition of Funds, along with Shenzhen-Hong Kong Stock Connect which may come into effect this year, will provide additional fuel for local capital markets.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## CONSOLIDATED FINANCIAL REVIEW

### Financial Highlights

HK\$m	Half-year ended 30 June 2016	Half-year ended 31 December 2015	(Restated) Half-year ended 30 June 2015
<b>FROM CONTINUING OPERATIONS</b>			
Net interest income	12,172	12,447	13,292
Non-interest income	8,573	7,765	7,438
Net operating income before impairment allowances	20,745	20,212	20,730
Operating expenses	(5,820)	(6,333)	(5,503)
Operating profit before impairment allowances	14,925	13,879	15,227
Operating profit after impairment allowances	14,399	13,416	14,759
Profit before taxation	14,540	13,736	15,216
Profit attributable to the equity holders of the Company	42,731	13,409	13,387
– from continuing operations	11,814	11,883	12,086
– from discontinued operations	30,917	1,526	1,301

In the first half of 2016, the Group focused on leveraging its diversified business platforms and was proactive in managing its balance sheet and overcame challenges in the operating environment, capturing market opportunities to further expand its businesses. At the same time, it continued to strengthen risk control, internal control and compliance management in its operations to achieve sustainable and healthy growth. During the period, the Group successfully completed the disposal of all the issued shares of NCB with a gain of HK\$29,956 million. In the first half of 2016, profit attributable to the equity holders reached HK\$42,731 million, an increase of 219.2% year-on-year. Profit attributable to the equity holders from continuing operations amounted to HK\$11,814 million while that from discontinued operations amounted to HK\$30,917 million, which included the gain on the disposal of NCB and NCB's profit contribution for the period prior to disposal.

For the Group's continuing operations, net operating income before impairment allowances amounted to HK\$20,745 million, up HK\$15 million, or 0.1%, year-

on-year, which was driven by the increase in net trading gain of the banking business, mainly contributed by the higher net gain on foreign exchange swap contracts and the growth in currency exchange income from customer transactions. The increase was, however, partially offset by the decline in net interest income, resulting from the narrowing of net interest margin, and the decrease in net operating income of the Group's insurance segment. Net fee and commission income decreased slightly as investment sentiment weakened notably in the first half of this year. Operating expenses rose as the Group continued to invest in its long-term development. Meanwhile, a lower net gain from fair value adjustments on investment properties was recorded. Taxation reduced, mainly due to the lower overseas taxation incurred by the Group's cross-border businesses. Profit attributable to the equity holders amounted to HK\$11,814 million, down 2.3% year-on-year.

As compared with the second half of 2015, net operating income before impairment allowances for the Group's continuing operations increased by HK\$533 million, or 2.6%. The increase was mainly driven by the growth in

# MANAGEMENT'S DISCUSSION AND ANALYSIS

net trading gain of the banking business and the strong rise in net operating income of the Group's insurance segment. The increases were partially offset by the decline in net interest income, resulting from the narrowing of net interest margin, and the lower net fee and commission income. Operating expenses fell as did the net gain from fair value adjustments on investment properties. The

Group also recognised deferred tax assets in the second half of 2015 in respect of the temporary differences arising from taxation incurred by the Group's cross-border businesses, resulting in lower net tax expenses for comparison. Consequently, profit attributable to the equity holders from continuing operations decreased slightly by HK\$69 million, or 0.6%, on a half-on-half basis.

## INCOME STATEMENT ANALYSIS

The following income statement analysis is based on the Group's continuing operations and the comparative information has been restated accordingly.

### *Net Interest Income and Net Interest Margin*

HK\$'m, except percentages	<b>Half-year ended 30 June 2016</b>	Half-year ended 31 December 2015	(Restated) Half-year ended 30 June 2015
Interest income	<b>17,767</b>	18,532	19,542
Interest expense	<b>(5,595)</b>	(6,085)	(6,250)
Net interest income	<b>12,172</b>	12,447	13,292
Average interest-earning assets	<b>1,895,300</b>	1,810,640	1,720,778
Net interest spread	<b>1.19%</b>	1.27%	1.45%
Net interest margin*	<b>1.29%</b>	1.36%	1.56%

\* Net interest margin is calculated by dividing net interest income by average interest-earning assets.

Compared with the first half of 2015, the Group's net interest income decreased by HK\$1,120 million or 8.4%. The decrease was attributable to the lower net interest margin, partially offset by the growth in average interest-earning assets.

Average interest-earning assets expanded by HK\$174,522 million, or 10.1% year-on-year, mainly supported by the increase in deposits from customers as well as deposits and balances from banks. The average balances of both advances to customers and debt securities investments increased.

Net interest margin was 1.29%, down 27 basis points. The drop in net interest margin was due to the lower average interest spread of RMB business caused by the drop in RMB market interest rates, the lower long-term interest rates versus short-term interest rates in the first quarter, and the increase of RMB funds from the clearing bank business. The narrowing of net interest margin was also due to the increase in lower-yielding short-term debt securities investments. The negative impact of these factors on net interest margin was partially offset by the Group's effective control on deposit pricing, an improved deposit mix with the higher proportion of low-interest and interest free deposits, and increased advances to customers.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

The table below summarises the average balances and average interest rates of individual categories of assets and liabilities:

	Half-year ended 30 June 2016		Half-year ended 31 December 2015		(Restated) Half-year ended 30 June 2015	
	Average balance HK\$'m	Average yield %	Average balance HK\$'m	Average yield %	Average balance HK\$'m	Average yield %
<b>ASSETS</b>						
Balances and placements with banks and other financial institutions	<b>336,342</b>	<b>1.43</b>	336,008	1.93	370,970	2.66
Debt securities investments	<b>604,413</b>	<b>1.64</b>	598,385	1.79	517,535	2.10
Advances to customers	<b>932,230</b>	<b>2.22</b>	860,660	2.25	816,982	2.25
Other interest-earning assets	<b>22,315</b>	<b>0.84</b>	15,587	0.93	15,291	1.86
Total interest-earning assets	<b>1,895,300</b>	<b>1.88</b>	1,810,640	2.03	1,720,778	2.29
Non interest-earning assets <sup>1</sup>	<b>513,262</b>	–	541,918	–	549,104	–
Total assets	<b>2,408,562</b>	<b>1.48</b>	2,352,558	1.56	2,269,882	1.74
<b>LIABILITIES</b>						
	Average balance HK\$'m	Average rate %	Average balance HK\$'m	Average rate %	Average balance HK\$'m	Average rate %
Deposits and balances from banks and other financial institutions	<b>246,712</b>	<b>0.75</b>	237,067	0.91	177,319	0.81
Current, savings and time deposits	<b>1,326,234</b>	<b>0.62</b>	1,292,742	0.66	1,261,863	0.81
Subordinated liabilities	<b>19,533</b>	<b>2.72</b>	19,492	2.39	19,628	2.11
Other interest-bearing liabilities	<b>36,336</b>	<b>1.60</b>	38,665	2.28	39,774	1.24
Total interest-bearing liabilities	<b>1,628,815</b>	<b>0.69</b>	1,587,966	0.76	1,498,584	0.84
Shareholders' funds <sup>2</sup> and other non interest-bearing deposits and liabilities <sup>1</sup>	<b>779,747</b>	–	764,592	–	771,298	–
Total liabilities	<b>2,408,562</b>	<b>0.47</b>	2,352,558	0.51	2,269,882	0.56

1. Including assets held for sale and liabilities associated with assets held for sale respectively.

2. Shareholders' funds represent capital and reserves attributable to the equity holders of the Company.

Compared with the second half of 2015, average interest-earning assets grew by HK\$84,660 million, or 4.7%, which was supported by the increase in deposits from customers. Net interest income decreased by HK\$275 million, or 2.2%, due to the narrowing of net interest margin. Net interest margin fell by 7 basis points, owing to the lower average interest spread of RMB business mainly caused by the drop in RMB interest rates, the lower long-term interest rates versus short-term interest rates in the first quarter, and the increase of RMB funds from the

clearing bank business. There were heightened volatilities in RMB interest rates in the offshore market in the first quarter of the year with negative impact on the Group's net interest margin. With the volatility in offshore RMB interest rates stabilising in the second quarter, the Group proactively managed deposit cost and improved deposit mix. As a result of these, together with the increase in advances to customers, net interest margin for the second quarter improved substantially.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Net Fee and Commission Income

HK\$'m	Half-year ended 30 June 2016	Half-year ended 31 December 2015	(Restated) Half-year ended 30 June 2015
Loan commissions	2,216	2,069	1,217
Credit card business	1,863	1,929	1,798
Insurance	896	811	740
Securities brokerage	887	1,253	2,144
Funds distribution	362	341	572
Bills commissions	310	289	254
Payment services	291	291	272
Trust and custody services	225	236	237
Currency exchange	167	153	149
Safe deposit box	151	137	127
Others	385	368	354
Fee and commission income	7,753	7,877	7,864
Fee and commission expense	(2,086)	(2,137)	(2,139)
Net fee and commission income	5,667	5,740	5,725

Net fee and commission income amounted to HK\$5,667 million. With the exception of fee and commission income from securities brokerage, funds distribution and trust and custody services which dropped amid weakening investment sentiment, income from other businesses recorded satisfactory growth year-on-year. The Group leveraged its diversified business platforms to record healthy growth in a number of businesses. In particular, loan commissions grew by 82.1%, due to the strong growth of commission income from corporate loans. During the period, the Group captured opportunities from the Belt and Road, Southeast Asia and Hong Kong and actively explored customers' financing needs which resulted in a satisfactory growth in new loan drawdowns and loan commitments. Income from insurance grew by 21.1% with the rise in business volume. Income from currency exchange rose by 12.1%, driven by the higher demand for foreign currency banknotes in the Mainland of

China. Fee and commission income from bills, safe deposit box, payment services and credit cards also recorded healthy growth. However, fee and commission income from securities brokerage and funds distribution dropped by 58.6% and 36.7% respectively from the high level in the first half of 2015. The decrease in fee and commission expense was mainly due to lower securities brokerage related expenses.

Compared with the second half of 2015, net fee and commission income decreased slightly by HK\$73 million, or 1.3%. The decline mainly resulted from the decrease in commission income from securities brokerage. During the same period, loan commissions and fee and commission income from insurance, funds distribution, bills, currency exchange and safe deposit box grew satisfactorily. Fee and commission expense fell, mainly due to lower credit card and securities brokerage related expenses.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Net Trading Gain

HK\$'m	Half-year ended 30 June 2016	Half-year ended 31 December 2015	(Restated) Half-year ended 30 June 2015
Foreign exchange and foreign exchange products	1,679	1,739	316
Interest rate instruments and items under fair value hedge	531	86	207
Commodities	63	28	29
Equity and credit derivative instruments	32	41	153
Net trading gain	2,305	1,894	705

Net trading gain increased strongly by HK\$1,600 million, or 227.0% year-on-year, to HK\$2,305 million. Net trading gain from foreign exchange and foreign exchange products increased by HK\$1,363 million, primarily due to the net gain from foreign exchange swap contracts\* in the first half of 2016 versus the net loss in the same period of 2015, as well as the increase in currency exchange income from customer transactions. Net trading gain from interest rate instruments and items under fair value hedge increased by HK\$324 million, mainly attributable to the mark-to-market changes of certain debt securities. The increase in net trading gain from commodities was due

to the increased gain in bullion transactions. The decrease in net trading gain from equity and credit derivative instruments was mainly due to the decreased income from equity-linked products.

Compared with the second half of 2015, the net trading gain increased by HK\$411 million, or 21.7%. The increase was mainly attributable to the mark-to-market changes of certain debt securities, partially offset by the lower currency exchange income from customer transactions in the first half of 2016.

\* Foreign exchange swap contracts are usually used for the Group's liquidity management and funding activities. Under the foreign exchange swap contracts, the Group exchanges one currency (original currency) for another (swapped currency) at the spot exchange rate (spot transaction) and commits to reverse the spot transaction by exchanging the same currency pair at a future maturity date at a predetermined rate (forward transaction). In this way, surplus funds in the original currency are swapped into another currency for liquidity and funding purposes with minimal foreign exchange risk. The exchange difference between the spot and forward contracts is recognised as a foreign exchange gain or loss (as included in "net trading gain"), while the corresponding interest differential between the surplus funds in the original currency and swapped currency is reflected in net interest income.

## Net Gain/(Loss) on Financial Instruments Designated at Fair Value through Profit or Loss (FVTPL)

HK\$'m	Half-year ended 30 June 2016	Half-year ended 31 December 2015	(Restated) Half-year ended 30 June 2015
Net gain/(loss) on financial instruments designated at fair value through profit or loss	1,032	(600)	(167)

The Group recorded a net gain of HK\$1,032 million on financial instruments designated at FVTPL in the first half of 2016, compared with a net loss of HK\$167 million in the first half of 2015. The change was mainly attributable to the mark-to-market gain of debt securities investments of BOC Life in the first half of 2016, as opposed to the mark-to-market loss in the first half of 2015, which were both caused by market interest rate movements. This was partially offset by the net trading loss from its equity securities investments. The changes in market value of its

debt securities portfolio were offset by the corresponding changes in policy reserves, as reflected in the changes in net insurance benefits and claims attributable to the movement of market interest rates.

The Group recorded a net gain on financial instruments designated at FVTPL in the first half of 2016, as opposed to a net loss in the second half of 2015. The net loss in the second half of 2015 was mainly attributable to the net trading loss of equity securities investments of BOC Life.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Operating Expenses

HK\$'m	Half-year ended 30 June 2016	Half-year ended 31 December 2015	(Restated) Half-year ended 30 June 2015
Staff costs	3,192	3,503	3,065
Premises and equipment expenses (excluding depreciation)	741	748	688
Depreciation on owned fixed assets	903	881	851
Other operating expenses	984	1,201	899
Total operating expenses	5,820	6,333	5,503

	At 30 June 2016	At 31 December 2015	(Restated) At 30 June 2015
Staff headcount measured in full-time equivalents	12,321	12,576	12,159

Total operating expenses increased by HK\$317 million, or 5.8% year-on-year, to HK\$5,820 million, reflecting the Group's strengthening of resources allocation, continuous investments in service capabilities and infrastructure to support business growth. Nevertheless, the Group remained conscious of the need for disciplined cost control to enhance operational efficiency. The cost to income ratio was 28.05%, below the industry average.

Staff costs increased by 4.1%, reflecting higher salaries following the annual salary increment and increased headcount.

Premises and equipment expenses were up 7.7%, owing to higher IT and rental costs.

Depreciation on owned fixed assets rose by 6.1%, due to a larger depreciation charge on premises following the upward property revaluation in Hong Kong in 2015 and on IT equipment as the Group continued to invest in its IT infrastructure.

Other operating expenses grew by 9.5%, mainly due to higher business tax and promotional expenses.

Compared with the second half of 2015, operating expenses declined by HK\$513 million, or 8.1%. The decrease was mainly attributable to lower staff costs, advertising and promotional expenses as well as business tax in the first half of 2016.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Net Charge of Loan Impairment Allowances

HK\$'m	Half-year ended 30 June 2016	Half-year ended 31 December 2015	(Restated) Half-year ended 30 June 2015
Net charge of allowances before recoveries			
– individually assessed	(185)	(351)	(239)
– collectively assessed	(415)	(234)	(314)
Recoveries	56	68	88
Net charge of loan impairment allowances	(544)	(517)	(465)

Net charge of loan impairment allowances increased by HK\$79 million or 17.0% year-on-year. Net charge of individually assessed impairment allowances amounted to HK\$185 million, mainly caused by the downgrade of a few corporate advances. The higher net charge of collectively assessed impairment allowances was mainly due to the growth in advances to customers. During the period, recoveries amounted to HK\$56 million.

Total loan impairment allowances as a percentage of gross advances to customers was 0.34% as at 30 June 2016, unchanged from the end of 2015.

Compared with the second half of 2015, net charge of loan impairment allowances increased by HK\$27 million, or 5.2%. The higher net charge of collectively assessed impairment allowances as a result of the increase in advances to customers was partly offset by the lower net charge of individually assessed impairment allowances.

## BALANCE SHEET ANALYSIS

### Asset Deployment

HK\$'m, except percentages	At 30 June 2016		At 31 December 2015	
	Amount	% of total	Amount	% of total
Cash and balances with banks and other financial institutions	362,789	15.4	230,730	9.7
Placements with banks and other financial institutions maturing between one and twelve months	63,980	2.7	64,208	2.7
Hong Kong SAR Government certificates of indebtedness	108,570	4.6	101,950	4.3
Securities investments <sup>1</sup>	622,809	26.3	574,998	24.3
Advances and other accounts	1,014,095	42.9	920,214	38.9
Fixed assets and investment properties	64,748	2.7	65,695	2.8
Other assets <sup>2</sup>	127,241	5.4	109,596	4.6
Assets held for sale	–	–	300,473	12.7
Total assets	2,364,232	100.0	2,367,864	100.0

- Securities investments comprise investment in securities and financial assets at fair value through profit or loss.
- Interests in associates and a joint venture, deferred tax assets and derivative financial instruments are included in other assets.

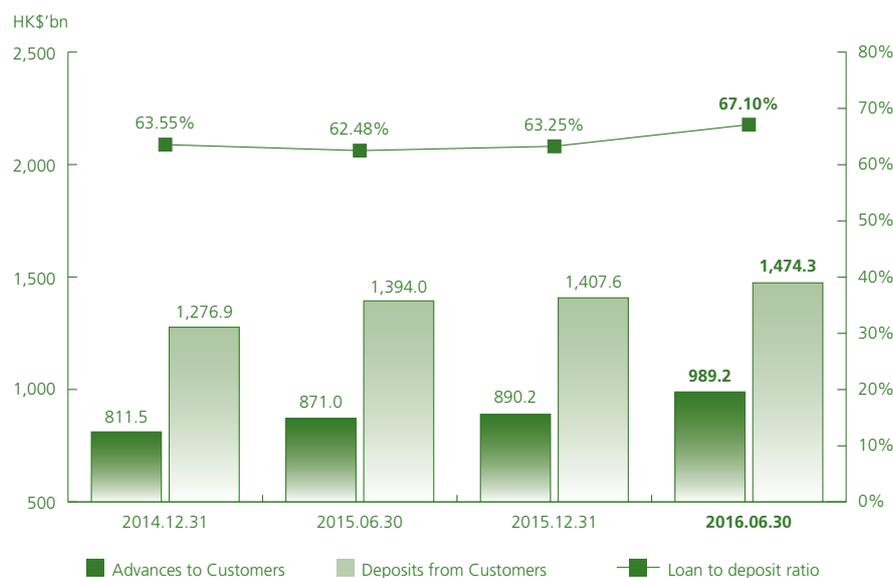
# MANAGEMENT'S DISCUSSION AND ANALYSIS

As at 30 June 2016, total assets of the Group amounted to HK\$2,364,232 million, a slight decrease of HK\$3,632 million, or 0.2%, from the end of 2015. The Group maintained its proactive management of assets and liabilities and optimised its asset mix in response to challenges in the operating environment.

Key changes in the Group's total assets include the following:

- Cash and balances with banks and other financial institutions increased by 57.2%, mainly due to the increase in balances with central banks as well as banks and other financial institutions relating to the Group's RMB business.
- Securities investments increased by 8.3%, with increases mainly in high-quality banks and financial institutions as well as corporate bonds.
- Advances and other accounts rose by 10.2%, with the growth in advances to customers by 11.1%.
- Other assets grew by 16.1%, which was led by the increase in account receivable and prepayments, reinsurance assets and derivative financial instruments.
- Assets held for sale dropped to zero as the Group completed the disposal of NCB.

**Advances to customers and deposits from customers\***



# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Advances to Customers

HK\$m, except percentages	At 30 June 2016		At 31 December 2015	
	Amount	% of total	Amount	% of total
Loans for use in Hong Kong	<b>660,343</b>	<b>66.8</b>	571,487	64.2
Industrial, commercial and financial	<b>384,549</b>	<b>38.9</b>	300,766	33.8
Individuals	<b>275,794</b>	<b>27.9</b>	270,721	30.4
Trade finance	<b>84,578</b>	<b>8.5</b>	79,108	8.9
Loans for use outside Hong Kong	<b>244,287</b>	<b>24.7</b>	239,648	26.9
Total advances to customers	<b>989,208</b>	<b>100.0</b>	890,243	100.0

In the first half of 2016, the Group captured opportunities from the implementation of China's important strategies, continued to leverage its strong customer base and optimise customer segments. It also stepped up collaboration with BOC and reinforced its financial services to corporates. It remained the top mandated arranger in the Hong Kong-Macau syndicated loan market. To achieve quality loan growth, it remained focused on customer selection. Advances to customers grew by HK\$98,965 million, or 11.1%, to HK\$989,208 million in the first half of 2016.

During the period, the Group was active in capturing opportunities in its lending business to Mainland enterprises going global and leading corporates from the ASEAN region with their loans for use in Hong Kong and overseas. In addition, the Group proactively developed local businesses with leading corporates and SMEs, enhancing servicing and marketing efforts, resulting in a satisfactory growth in advances to customers.

Loans for use in Hong Kong grew by HK\$88,856 million or 15.5%.

- Lending to the industrial, commercial and financial sectors increased by HK\$83,783 million, or 27.9%, representing a broad-based growth in various industry sectors including property development, transport and transport equipment, manufacturing, information technology, property investment and recreational activities.
- Lending to individuals increased by HK\$5,073 million, or 1.9%. Residential mortgage loans (excluding those under the Government-sponsored home purchasing schemes) grew by 1.1%.

Trade finance rose by HK\$5,470 million, or 6.9% while loans for use outside Hong Kong grew by HK\$4,639 million, or 1.9%.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Loan Quality

HK\$m, except percentages	At 30 June 2016	At 31 December 2015
Advances to customers	<b>989,208</b>	890,243
Classified or impaired loan ratio	<b>0.25%</b>	0.24%
Total impairment allowances	<b>3,370</b>	3,009
Total impairment allowances as a percentage of advances to customers	<b>0.34%</b>	0.34%
Residential mortgage loans <sup>1</sup> – delinquency and rescheduled loan ratio <sup>2</sup>	<b>0.02%</b>	0.02%
Card advances – delinquency ratio <sup>2</sup>	<b>0.26%</b>	0.20%

	Half-year ended 30 June 2016	Half-year ended 30 June 2015
Card advances – charge-off ratio <sup>3</sup>	<b>1.48%</b>	1.40%

1. Residential mortgage loans exclude those under the Home Ownership Scheme and other government-sponsored home purchasing schemes.
2. The delinquency ratio is measured by the ratio of the total amount of overdue advances (more than three months) to total outstanding advances.
3. The charge-off ratio is measured by the ratio of total write-offs made during the period to average card receivables during the period.

The Group maintained benign asset quality during the period. The classified or impaired loan ratio was 0.25%. Classified or impaired advances to customers rose by HK\$344 million, or 16.4%, to HK\$2,440 million, due to the downgrade of a few corporate loans.

The credit quality of the Group's residential mortgage loans and card advances remained sound. The combined delinquency and rescheduled loan ratio of residential mortgage loans was 0.02% at the end of June 2016. The charge-off ratio of card advances remained low at 1.48% in the first half of 2016.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Deposits from Customers\*

HK\$'m, except percentages	At 30 June 2016		At 31 December 2015	
	Amount	% of total	Amount	% of total
Demand deposits and current accounts	147,185	10.0	134,069	9.5
Savings deposits	795,535	53.9	717,747	51.0
Time, call and notice deposits	528,961	35.9	553,173	39.3
	<b>1,471,681</b>	<b>99.8</b>	1,404,989	99.8
Structured deposits	2,648	0.2	2,571	0.2
Deposits from customers	<b>1,474,329</b>	<b>100.0</b>	1,407,560	100.0

\* Including structured deposits

The Group maintained a flexible deposit strategy to support business growth, while proactively managing deposit pricing with further improvement in deposit mix and hence the higher proportion of low-interest and interest free deposits. Total deposits from customers rose by HK\$66,769 million, or 4.7%, to HK\$1,474,329 million as at 30 June 2016. The proportion of current and savings

deposits improved to 63.9%, up 3.4 percentage points from the end of 2015, as demand deposits and current accounts grew strongly by 9.8% while savings deposits increased by 10.8%. Time, call and notice deposits fell by 4.4%. The loan to deposit ratio was 67.10% at the end of June 2016, up 3.85 percentage points from the end of 2015.

## Capital and Reserves Attributable to the Equity Holders of the Company

HK\$'m	At 30 June 2016	At 31 December 2015
Share capital	52,864	52,864
Premises revaluation reserve	35,114	40,278
Reserve for fair value changes of available-for-sale securities	1,253	294
Regulatory reserve	9,278	10,879
Translation reserve	(4)	191
Retained earnings	130,081	88,072
Reserves	<b>175,722</b>	139,714
Capital and reserves attributable to the equity holders of the Company	<b>228,586</b>	192,578

Capital and reserves attributable to the equity holders of the Company amounted to HK\$228,586 million as at 30 June 2016, increasing by HK\$36,008 million, or 18.7%, from the end of 2015. Retained earnings rose by 47.7%, mainly reflecting the profit for the first half of 2016 after the appropriation of the final dividend for 2015. The premises revaluation reserve decreased by 12.8%, which

was attributable to the amount released to retained earnings upon disposal of discontinued operations and the decline in the valuation of premises in the first half of 2016. The regulatory reserve fell by 14.7%, as the growth in advances to customers was more than offset by the amount released to retained earnings upon disposal of discontinued operations.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Capital Ratio and Liquidity Coverage Ratio

HK\$m, except percentages	At 30 June 2016	At 31 December 2015
Consolidated capital after deductions		
Common Equity Tier 1 capital	<b>164,802</b>	121,089
Additional Tier 1 capital	<b>445</b>	561
Tier 1 capital	<b>165,247</b>	121,650
Tier 2 capital	<b>41,346</b>	46,886
Total capital	<b>206,593</b>	168,536
Total risk-weighted assets	<b>886,811</b>	943,802
Common Equity Tier 1 capital ratio	<b>18.58%</b>	12.83%
Tier 1 capital ratio	<b>18.63%</b>	12.89%
Total capital ratio	<b>23.30%</b>	17.86%

	2016	2015
Average value of liquidity coverage ratio		
First quarter	<b>112.92%</b>	101.90%
Second quarter	<b>109.70%</b>	109.89%

The capital ratios are computed on a consolidated basis for regulatory purposes, comprising the positions of BOCHK and certain subsidiaries specified by the HKMA in accordance with the Banking (Capital) Rules.

The Group's objective is to maintain a strong capital base to support its sustainable development and to meet higher regulatory capital requirements at all times. Following the Group's designation as one of the domestic systemically important banks in Hong Kong, the Higher Loss Absorbency requirement will be phased-in from 2016 to 2019 in parallel with the Capital Conversation Buffer and Countercyclical Capital Buffer. While the Group continued to adopt proactive measures to manage its capital and risk-weights of its assets, its capital level has been significantly enhanced by the gain from the disposal of NCB.

At 30 June 2016, the Common Equity Tier 1 ("CET1") capital ratio was 18.58% and Tier 1 capital ratio was 18.63%, up 5.75 and 5.74 percentage points respectively from that at the end of 2015. Profits net of dividends paid

for the first half of 2016 and the effect of the Group's disposal of NCB drove up CET1 capital and Tier 1 capital by 36.1% and 35.8% respectively. Total risk-weighted assets ("RWA") were down 6.0%, as the increase in credit RWA due to the growth in advances to customers in the first half of 2016 was more than offset by the reduction in RWA following the disposal of NCB. The total capital ratio was 23.30%.

The average value of the liquidity coverage ratio ("LCR") is calculated based on the arithmetic mean of the LCR as at the end of each working day in the quarter and the calculation methodology and instructions set out in the HKMA return of liquidity position. The LCR is computed on a consolidated basis, which comprises the positions of BOCHK and certain subsidiaries specified by the HKMA in accordance with the Banking (Liquidity) Rules.

The Group's liquidity position stayed at a solid level in the first half of 2016. The average value of LCR in the first and second quarter of 2016 was 112.92% and 109.70% respectively, above the regulatory minimum.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## BUSINESS REVIEW

### Business Segment Performance

#### Profit/(Loss) before Taxation by Business Segments

HK\$'m, except percentages	Half-year ended 30 June 2016		(Restated) Half-year ended 30 June 2015	
	Amount	% of total	Amount	% of total
<b>FROM CONTINUING OPERATIONS</b>				
Personal Banking	3,692	25.4	5,607	36.8
Corporate Banking	6,485	44.6	5,056	33.2
Treasury	3,943	27.1	3,759	24.7
Insurance	611	4.2	649	4.3
Others	(191)	(1.3)	145	1.0
Total profit before taxation	14,540	100.0	15,216	100.0

Note: For additional segmental information, see Note 40 to the Interim Financial Information.

## PERSONAL BANKING

### Financial Results

Personal Banking's profit before taxation was HK\$3,692 million in the first half of 2016, a decrease of HK\$1,915 million, or 34.2%, year-on-year. The increase in net interest income was offset by the drop in net fee and commission income.

Net interest income increased by 6.3%. This was mainly driven by the improvement in the loan spread coupled with the increase in the average balance of deposits and loans. The growth was partially offset by the decrease in the deposit spread. Net fee and commission income decreased by 30.5% as income from securities brokerage and funds distribution dropped sharply from the high level in the first half of 2015, as investment sentiment weakened notably in the first half of the year. Fee and commission income from insurance and safe deposit box grew healthily. Net gain on other financial assets dropped year-on-year as the Group captured market opportunities to dispose of certain equity instruments and realised a significant net gain in the first half of 2015.

### Business operations

#### **Reinforcing market leadership in residential mortgages and expanding other retail loan services**

Despite the slowdown in transaction volume of the local residential property market, the Group maintained its leadership position in new residential mortgage

loans in the first half of 2016. To capture new business opportunities, it enriched its mortgage service portfolio and improved the quality of its products and services across all channels. In addition, the Group optimised the approval process which shortens the turnaround time for credit assessment, dedicated to further enhancing customer experience and service efficiency. During the period, the Group also made a conscious effort to enrich the retail lending services by expanding the list of eligible collaterals for secured lending services. This provides flexibility and convenience to the Group's wealth management customers, helping them to capture investment opportunities in a timely manner and to accumulate wealth efficiently.

#### **Enhancing the investment and insurance business product range**

Heightened global financial market volatility and general weakness in the global recovery dampened market sentiments, resulting in a notable year-on-year decline in stock market transactions. Correspondingly, the Group's investment business was adversely affected with lower commission income from securities brokerage and funds distribution. Despite sluggish market sentiments during the period, the Group actively acquired new securities customers and provided customers with a series of investor education and market analysis activities, achieving a steady growth in the number of customers.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

In the funds distribution business, the Group continued to broaden its product offerings. During the period, a number of currency-hedged share classes, including RMB, EUR and USD were introduced and additional southbound funds under the Mainland-Hong Kong Mutual Recognition of Funds were distributed to broaden the number of investment choices for customers. The Group also enhanced its marketing and promotional campaigns in order to deepen relationships with customers and enhance cross-selling opportunities. It also continued enhancing the sales process to improve the customer experience and sales efficiency.

With regard to the Bancassurance business, the Group maintained its leading position in the Hong Kong RMB insurance market. The Group is committed to offer a diversified range of products to meet customers' needs under different life stages. The Group also conducted a series of marketing campaigns to promote insurance businesses to different customer segments.

## ***Continuous improvement in credit card service***

The continuing decline in total retail sales in Hong Kong during the first half of 2016 was reflected in the lower volume of the Group's credit cardholder spending. At the same time, however, the Group recorded a year-on-year growth in the volume of merchant acquiring business as the Group successfully acquired a number of new major merchants in Hong Kong during the period. It also maintained its leadership in the UnionPay merchant acquiring business and card issuing business in Hong Kong. During the review period, focus was made on acquiring mid- to high-end personal customers as well as high-quality corporate customers. It also introduced a number of new credit cards to meet the needs of different customer segments. In view of the weakened retail sales in Hong Kong, the Group launched targeted promotional programmes to increase cardholder spending on daily necessities, online shopping and overseas purchases. It also encouraged the use of e-Channels to improve cost efficiency and the customer experience, and initiated a series of marketing activities to promote the use of the "BOCHK Credit Card" WeChat official account. From July, the Group also introduced Apple Pay, a fast, convenient and secure mobile payment service, to its credit cardholders in order to enhance the payment experience of cardholders.

## ***Recognised wealth management services***

The Group made a continuous effort to deepen existing customer relationships and acquire new customers in the mid- to high-end market. During the first half of 2016, the Group enhanced its Wealth Management and Enrich Banking services, organised a series of value-added customer events and launched new services to meet customers' banking and investment needs at different life stages. A series of marketing programmes, including Family Banking-themed promotions, were also launched to strengthen the Group's brand image and increase penetration of targeted customer segments. Following the establishment of the Cross-border Financial Services Centre in 2015, the Group further optimised its cross-border sales and service model by offering tiered promotional offers to different customer groups and standardising account opening procedures. As a result, the Group recorded a continuous increase in the number of new cross-border customers. The total number of Wealth Management and Enrich Banking customers together with their total relationship balances also registered satisfactory growth. In recognition of its outstanding performance in retail banking, BOCHK received the Best Retail Bank in Hong Kong award for the second consecutive year and the Wealth Management Business of the Year 2016 award, both from *The Asian Banker*.

In the first half of the year, the Group's Private Banking business focused on a number of initiatives to drive its overall business development. It continued to cooperate closely with different units of the Group and BOC's Mainland and overseas entities to expand its customer base. With an enhanced open platform for tailor-made products and services and its expanded professional team, the Group broadened the service capabilities to serve the specific needs of the high net-worth clients. In addition, it continued to optimise its business platform by streamlining its processes and enhancing the Private Banking Internet Banking to enrich the customer experience. Besides, the Group participated in a number of activities, both in Hong Kong and in Southeast Asia, with an aim to raise its brand awareness. As a result, both the number of Private Banking clients and their assets under management achieved satisfactory and encouraging growth.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## ***Optimising distribution channels***

The Group continued to optimise its distribution channels to meet the needs of customers. A branch network transformation project was launched in 2015 with an aim to support the integrated service model for personal and corporate customers. The Group divided the branch network into different districts and areas to allow for better branch management. Training, new product and service packages and greater cooperation with the commercial centres enabled the Group to enjoy increased referrals and offer lending and other SME services to targeted customers. At the end of June 2016, the Group's service network in Hong Kong comprised 220 branches, including 92 wealth management centres. At the same time, the Group increased the number of coverage points in its automated banking network. BOCHK was granted approval to set up a branch in Brunei Darussalam, making it the first Chinese financial institution to establish a branch in the country and making a new phase in bilateral financial cooperation between Brunei Darussalam and China. Preparations for the branch opening are currently well underway.

## ***Enhancing Internet finance service capabilities***

In line with developments in the Internet, big data and cloud computing, the Group formulated an Internet finance development plan in 2015 in order to integrate Internet technology with its traditional banking business. During the first half of 2016, the Group enriched its applications for mobile finance with services such as e-Cheque Services, Online Loans and Mobile P2P Small Value Transfers. The Group was the first bank in Hong Kong to launch an e-Cheque service for mobile banking and an e-Cheque drop box for bill payments. It also initiated the development of a Big Data platform and research into biometric authentication technology. In addition, cooperation with BOC reinforced synergy in cross-channel integration which further uplifted the Group's servicing capabilities. All these factors pushed up the Group's total number of customers of e-Channels, including Internet and Mobile Banking services, from the end of 2015. Recognising the importance of cyber security, the Group established an independent security workgroup to handle all security-related issues and built a Cyber Intelligence Platform to ensure system and transaction security. In addition, BOCHK signed a Memorandum of

Understanding with Hong Kong Applied Science and Technology Research Institute ("ASTRI") to establish the BOCHK-ASTRI FinTech Collaboration Centre, which aims to develop latest financial technologies (FinTech) which can be applied to the banking industry, fostering FinTech's development in Hong Kong. In acknowledgment of its technological innovations, BOCHK was awarded the Best Mobile Social Media Engagement Project in The Asian Banker Technology Awards 2016.

## **CORPORATE BANKING**

### **Financial Results**

Corporate Banking's profit before taxation was HK\$6,485 million, a growth of HK\$1,429 million, or 28.3%, year-on-year. The growth was mainly driven by the increase in net interest income and net fee and commission income.

Net interest income increased by 13.0%, with the positive impact from the increase in the average balance of loans and deposits. Net fee and commission income rose by 54.8%, largely led by the strong growth in loan commissions. During the period, the Group's Corporate Banking succeeded in capturing opportunities in its lending business to leading Mainland corporates expanding overseas, and leading local enterprises. Operating expenses were up 12.4%, mainly due to the increase in staff costs and rental expenses.

### **Business operations**

#### ***Regional expansion and continuous business development in ASEAN***

The Group succeeded in capturing opportunities arising out of major national strategic initiatives. During the period, it strengthened collaboration with BOC's branches and provided leading Mainland enterprises with funding solutions in support of their expansion into countries along the Belt and Road and in the ASEAN region. The Group also extended lending to key customers for major projects in ASEAN, further raising the Group's market share and influence there. The Group also cooperated with BOC branches to provide trade-related products and services. To accelerate its business development in the ASEAN region, the Group set up a working team to coordinate and manage integration with BOC and its branches.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

To capture business opportunities arising from the Going Global Strategy, the Group deepened collaboration with BOC entities in the Mainland and overseas. It also completed financing projects for several cross-border merger and acquisition ("M&A") transactions in support of Mainland enterprises' overseas expansion. In addition, co-operation among BOC's Guangdong, Hong Kong and Macau operations intensified during the period, further raising BOC Group's market influence in these areas. Whatsmore, acting as BOC's Asia-Pacific Syndicated Loan Centre, the Group worked closely with BOC's overseas branches on a number of significant syndicated loans. Through these activities, the Group remained the top mandated arranger in the Hong Kong-Macau syndicated loan market in the first half of 2016.

## ***Enhancing business development in the local commercial sector***

In the first half of 2016, the Group further expanded its customer base with an increased number of leading enterprises. Cooperating with these enterprises, the Group was able to establish a convenient and effective financial service platform to help improve their overall market competitiveness. It also stepped up marketing aimed at strengthening relationships with local family-owned businesses and trade associations, and made inroads with second- and third-tier listed companies. With continued progress in its branch network transformation project to drive business integration between commercial centres and branches, the Group reinforced its ability to serve SME customers. For small enterprises, the Group formulated a standardised sales and service model and tailor-made products and services according to the needs of customers. In recognition of the Group's long-standing support of SMEs in Hong Kong, BOCHK received the Best SME's Partner Award from the Hong Kong General Chamber of Small and Medium Business for the ninth year in a row.

## ***Enlarged customer base of institutional businesses***

The Group continued to extend cooperation and strengthen relationships with other overseas central banks and corresponding banks. In collaboration with BOC, the Group successfully secured business relationships with overseas regional development banks and made a breakthrough in forming relationships with the world's largest sovereign wealth fund. Locally, the Group expanded cooperation with public sector entities and

acted as the receiving bank for a number of major IPOs in Hong Kong, thereby consolidating its leading position in this market.

## ***Product innovation in the transaction banking business***

The Group improved its competitiveness in the trade finance business through continuous product innovation and feature enhancements. During the period, the Group launched the USD Trade Finance Incentive programme and the new concept of Trade Buffet programme, both of which are helping to explore customer potential. It also launched innovative financing solutions tailored to customer needs and market changes. At the same time, the Group continued to improve its service capabilities in cross-border cash management. Working closely with BOC, it implemented cross-border cash pooling services for a number of large corporate clients and assisted them in maximising cash liquidity through onshore and offshore two-way cash sweeping. In March 2016, the Group pioneered the launch of payment services by e-Cheque and subsequently introduced solutions to support large corporates issuing e-Cheques via ERP Integration and Corporate File Transfer Service. In recognition of its outstanding transaction banking services, BOCHK was named Best Cash Management Bank in Hong Kong for the fourth consecutive year by *The Asian Banker*. It was also named the Best Transaction Bank in Hong Kong for 2016 and a trade finance project undertaken by BOCHK received the Best Corporate Trade Finance Deal in Hong Kong for 2016.

## ***Enlarging the customer base for custody services***

In the first half of 2016, the higher number of M&A activities in the market resulted in a robust demand for escrow deals. Segregated mandates and proprietary accounts fared better than funds in general. However, other client segments were affected to various degrees by market volatility and subdued turnover volumes. With its diversified client base and new clients active in portfolio building, the Group was able to capture new business. During the period, it successfully established business relationships with new client segments from the Mainland of China, Hong Kong and overseas. The Group also collaborated more closely with BOC and its overseas entities to enhance the overall service capabilities of the BOC Group. In recognition of its outstanding custody services, the Group won the award as the Best Custody

# MANAGEMENT'S DISCUSSION AND ANALYSIS

Specialist – China from *The Asset* magazine. At the end of June 2016, excluding the RMB fiduciary accounts for participating banks, total assets under the Group's custody were valued at HK\$758.5 billion.

## ***Proactive measures to contain risks***

In the first half of 2016, the Group adhered to a prudent credit policy under the Know Your Customers principle. In view of the increasing volatility in RMB exchange rates as well as the downtrend in local retail sales, the Group performed credit monitoring on a more frequent and proactive basis. This included closely monitoring the credit positions of customers and industries that could be adversely affected by the slowdown in global economic growth. More stringent pre- and post-lending monitoring measures were also adopted to track early negative signs. Additionally, it put in place a solution for effectively monitoring the credit of major groups of customers with concentration risk. Finally, to accommodate the Group's business strategy associated with Mainland enterprises going global and the Belt and Road initiative as well as the Group's acquisition of BOC's assets in the ASEAN region, the Group has been raising the underwriting standards of its related credit policies and procedures in view of the risks associated with the local political and economic environment, tax issues and legal risks. Along with these new standards, the Group has been raising related underwriting standards in its credit policies and procedures with the aim of putting in place more efficient and sound risk control measures for the Group's business development in new markets.

## **TREASURY**

### **Financial Results**

Treasury's profit before taxation was HK\$3,943 million, an increase of 4.9% from the same period last year.

Net interest income decreased by 51.3%, mainly due to the decrease in the average balance of RMB balances and placements with banks, coupled with the decline in the average yield on related assets caused by the drop in market interest rates. The average yield of debt securities investments also declined. The decrease was, however, partially offset by the increase in the average balance of debt securities investments. Net trading gain was up strongly, primarily due to the net gain from foreign exchange swap contracts in the first half of 2016 versus the net loss in the same period of 2015, the increase in currency exchange income from customer transactions

as well as the mark-to-market changes of certain debt securities. Net gain on other financial assets increased strongly as the Group recorded a higher gain from the disposal of certain debt securities investments in the first half of 2016.

### **Business Operations**

#### ***Well-recognised development in the treasury business***

Responding to the complex economic environment, the Group continued to meet customers' needs with time-to-market and innovative products and services. It also pushed forward its strategy of diversified customer segments and revenue resources to drive business development. As a result, foreign exchange trading volume and related revenue for customer transactions grew satisfactorily from the same period in 2015. In the bond underwriting business, the Group strengthened its professional competence in the underwriting of USD and other currency-denominated bonds despite a downtrend in the demand for offshore RMB assets. In recognition of its outstanding performance in the treasury business, BOCHK received the Hong Kong Domestic Foreign Exchange Bank of the Year award in the Asian Banking and Finance Wholesale Banking Awards for the second consecutive year. BOCHK also won the Excellence Brand of Foreign Exchange award in The Hong Kong Leaders' Choice Award 2016, organised by Metro Finance, and received the Outstanding Treasury Business – Dim Sum Bond Market Maker, the Outstanding Retail Banking – Diversified Investment Business, and the Outstanding Treasury Product – (Foreign Exchange) Derivative Trading at the RMB Business Outstanding Awards 2016 organised by Metro Finance, Metro Finance Digital and Hong Kong *Wen Wei Po*.

#### ***Business expansion in the ASEAN region***

In line with its ASEAN development strategy, the Group set up closer cooperation mechanisms with BOC's entities in the region to promote further growth in their treasury business and support their funding needs. During the period, the Group visited several ASEAN countries and introduced treasury products to financial institutions and central banks in these countries to consolidate relationships. In the banknotes business, the Group strengthened relationships with banknotes suppliers and captured market opportunities in countries such as Thailand, Singapore and the Philippines.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## ***Optimising RMB clearing services***

The Group strengthened its clearing capabilities to ensure the stable development and continuous improvement of its RMB clearing services in Hong Kong and overseas. During the period, BOCHK received approval to join the CIPS, being the first overseas bank to join this system as a direct participant. The Group also completed the first cross-border RMB remittance transaction conducted by an offshore RMB clearing bank. Joining the CIPS will enable the Group to further enhance its overall RMB clearing capabilities.

## ***A proactive but risk aware investment strategy***

The Group managed its banking book investments proactively. It closely monitored changes in the market and actively looked for investment opportunities to enhance returns while remaining alert to risks. During the period, the Group increased its investments in certificates of deposits and bonds in anticipation of a moderate pace in US interest rate hike.

## **INSURANCE**

### **Financial Results**

Profit before taxation in the Group's Insurance segment was HK\$611 million in the first half of 2016, down 5.9% year-on-year. The decline was mainly caused by the trading loss in its equity investments portfolio, as compared to a trading gain in the first half of 2015, and the decrease in reinsurance income due to the decline in new RMB businesses amid the slowdown of the RMB insurance market. Net insurance premium income dropped by 59.6% as the Group adjusted its product mix by reducing single premium business but increasing regular premium business to ensure a stable stream of renewal premium income for long-term growth.

### **Business Operations**

#### ***Continued product enhancement and distribution channel diversification***

The Group continued to broaden its product offerings to meet the needs of customers and diversify its distribution channels to reach different customer segments. During the period, it launched new products such as the MaxiWealth ULife Insurance Plan and the UltraReach

Insurance Plan for customers with insurance and savings needs. It also enhanced the Forever Glorious ULife Plan and the BestCare Critical Illness Plan. By expanding the broker channel, tied agency channel and e-Channel, the Group was able to capture more business opportunities.

## ***Maintaining leadership in RMB insurance products***

The Group maintained its leading position in the Hong Kong RMB insurance market by focusing on product optimisation and innovation. In addition, the Group launched a variety of promotional programmes, including premium discounts and the title sponsorship for an RMB currency exchange rates programme on a TV news channel, to reinforce its professional image in RMB insurance. In recognition of its business performance in the industry, BOC Life received all awards in the RMB Business Outstanding Awards – Outstanding Insurance Business, organised by Metro Finance, Metro Finance Digital and Hong Kong *Wen Wei Po* for the fifth consecutive year.

## **DIVERSIFIED BUSINESS PLATFORMS**

### ***Good progress in asset management***

BOCHK Asset Management Limited ("BOCHK Asset Management") continued to expand its footprint in the first half of 2016. Under the Mainland-Hong Kong Mutual Recognition of Funds scheme, the BOCHK All Weather China High Yield Bond Fund was approved by the China Securities Regulatory Commission, and BOCHK Asset Management prepared for the launch of the fund in the Mainland in the second half of the year. Also during the review period, BOCHK Asset Management acted as the representative of Bank of China Investment Management Co., Ltd., a joint-venture company of BOC, to assist in the distribution of their southbound funds in Hong Kong. In addition, it continued to establish partnerships with BOC's overseas branches for promotion of its asset management services.

### ***Steady development in trustee services***

The Group engages in the provision of trustee, provident fund, retirement fund and unit trust administration services through its subsidiary company, BOCI-Prudential Trustee Limited ("BOCI-Prudential Trustee"). During the period, BOCI-Prudential Trustee collaborated with

# MANAGEMENT'S DISCUSSION AND ANALYSIS

different units of the Group to enhance its sales, referrals and cross-selling capabilities. In line with the ongoing development of the Internet, a number of functional enhancements were made to the Group's online MPF administration platform and mobile application to improve the overall customer experience. In addition, significant progress was made in preparation for the launch of the Default Investment Strategy proposed by the Government and the Mandatory Provident Fund Schemes Authority.

## **Product diversification in securities and futures brokerage services**

The Group engages in the provision of brokerage services for futures and options through its subsidiary company, Po Sang Futures Limited ("Po Sang Futures"). During the period, Po Sang Futures provided a wider range of products to meet the diverse needs of customers with the launch of trading services for Sector Index Futures Contracts and RMB Currency Futures Contracts. Through the promotional campaigns it launched during the period, Po Sang Futures enhanced its brand image.

## **Disposal of Nanyang Commercial Bank, Limited**

On 18 December 2015, the Group entered into a Sale and Purchase Agreement with Cinda Financial Holdings Co., Limited ("Cinda Financial") and jointly made an announcement with BOC in relation to the Group's disposal of all the issued shares of NCB.

The total consideration for the disposal is HK\$68 billion, which was determined with reference to various factors, including (i) the net asset value of NCB and the price-to-book multiples achieved in similar transactions in the Hong Kong banking sector; (ii) scarcity value of banking licences in Hong Kong and China; (iii) future development prospects of NCB and NCB (China); and (iv) potential synergies between NCB and China Cinda Asset Management Co., Ltd. and its subsidiaries.

The disposal was completed on 30 May 2016 (the "Completion Date") in accordance with the terms and conditions of the Sale and Purchase Agreement. Upon completion, NCB ceased to be a subsidiary of both BOC and the Group. BOCHK, NCB and Cinda Financial entered into a Transitional Services Agreement on the Completion Date, pursuant to which BOCHK provides certain transitional support services to NCB and NCB (China) at service charges mutually agreed upon by the parties for an initial term of three years from the Completion Date (which may be extended for a further 12-month period at the election of NCB and further extended if and as mutually agreed by the parties) to facilitate the transition.

For further information on the disposal, please refer to the joint announcements made by BOC and the Group on 18 December 2015 and 27 May 2016.

The operating results of NCB, which are reported as discontinued operations, for the period up to the date of the disposal and the first half of 2015 and the gain on disposal of NCB were as follows:

HK\$'m	Half-year ended 30 June 2016	Half-year ended 30 June 2015
Profit of discontinued operations for the period	961	1,301
Gain on disposal of discontinued operations	29,956	–

## **Acquisition Agreements in relation to the acquisitions of BOC Thailand and BOC Malaysia**

On 30 June 2016, BOCHK entered into Share Purchase Agreements with BOC in relation to the acquisitions of the entire issued share capital of Bank of China (Thai) Public Company Limited ("BOC Thailand") and the entire issued share capital of Bank of China (Malaysia) Berhad ("BOC Malaysia"), respectively, as part of the restructuring exercise of the Group in the ASEAN region.

The ASEAN region is a high growth market and a key region for the Belt and Road initiative and RMB internationalisation. It has also been one of the core regions for the BOC Group's overseas business development over the years. The acquisition of certain ASEAN assets from BOC signifies the start of the transition of BOCHK from a local bank into a regional bank. The Group will leverage its geographic advantage and professionalism to fully implement the integrated strategy

# MANAGEMENT'S DISCUSSION AND ANALYSIS

of BOC Group's domestic and overseas operations. By acquiring BOC Thailand and BOC Malaysia, the Group can ride on its status as the largest offshore RMB clearing bank and fully leverage its competitive edges in services, products and resources to build up business scale and strength. The Group will adopt a matrix management structure to oversee its ASEAN institutions. Meanwhile, a business supervisory committee has been set up to steer the overall business development in the region and a business integration team has been established to coordinate and manage the integration work, ensuring a smooth transition of business operations and management of the ASEAN institutions.

For further information on the acquisitions, please refer to the announcement made by the Group on 30 June 2016.

## RISK MANAGEMENT

### *Banking Group*

#### **Overview**

The Group believes that sound risk management is crucial to the success of any organisation. In its daily operation, the Group attaches a high degree of importance to risk management and emphasises that a balance must be struck between risk control and business development. The principal types of risk inherent in the Group's businesses are credit risk, interest rate risk, market risk, liquidity risk, operational risk, reputation risk, legal and compliance risk, and strategic risk. The Group's risk management objective is to enhance shareholder value by maintaining risk exposures within acceptable limits. The Group has a defined risk appetite statement approved by the Board, which is an expression of the types and level of risk that the Group is willing to take in a controllable way in order to achieve its business goals and to meet the expectations of its stakeholders.

#### **Risk management governance structure**

The Group's risk management governance structure is designed to cover all business processes and ensures various risks are properly managed and controlled in the course of conducting business. The Group has a robust risk management organisational structure with a comprehensive set of policies and procedures to identify, measure, monitor and control various risks that may arise. These risk management policies and procedures

are regularly reviewed and updated to reflect changes in markets and business strategies. Various groups of risk takers assume their respective responsibilities for risk management.

The Board of Directors, representing the interests of shareholders, is the highest decision-making authority of the Group and has the ultimate responsibility for risk management. The Board, with the assistance of its committees, has the primary responsibility for the formulation of risk management strategies and ensuring that the Group has an effective risk management system to implement these strategies.

The Risk Committee ("RC"), a standing committee established by the Board of Directors, is responsible for overseeing the Group's various types of risks, approving Level I risk management policies and monitoring their implementation, reviewing significant or high risk exposures or transactions and exercising its power of veto if it considers that any transaction should not proceed. The Audit Committee assists the Board in fulfilling its role in overseeing the internal control system.

The Chief Executive ("CE") is responsible for managing the Group's various types of risks, and material risk exposures or transactions within his authority delegated by the Board of Directors. The Deputy Chief Executives ("DCEs") assist the CE in fulfilling his responsibilities on the day-to-day management of various types of risk, and are responsible for approving material risk exposures or transactions within their authorities delegated by the CE. The Chief Risk Officer ("CRO") assists the CE in fulfilling his responsibilities for the day-to-day management of risks. The CRO is responsible for initiating new risk management strategies, projects and measures in response to regulatory changes that will enable the Group to better monitor and manage new risk issues or areas that may arise from time to time from new businesses, products and changes in the operating environment. The CRO is also responsible for reviewing material risk exposures or transactions within his delegated authority. In accordance with the principle of setting the hierarchy of risk management policies approved by the Board, Senior Management are also responsible for approving the detailed risk management policies of their responsible areas.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

Various units of the Group have their respective risk management responsibilities. Business units act as the first line of defence while risk management units, which are independent from the business units, are responsible for the day-to-day management of different kinds of risks. Risk management units have the primary responsibilities for drafting, reviewing and updating various risk management policies and procedures.

The Group's principal banking subsidiary, Chiyu, is subject to risk management policies that are consistent with those of the Group. Moreover, the Group's non-banking subsidiaries, such as BOC Life, are subject to the Group's risk management requirements. These subsidiaries are required to formulate their respective risk management policies based on the characteristics of their own industries, perform daily risk management responsibilities and report to BOCHK on a regular basis. Risk management units of BOCHK monitor the risk management status of these subsidiaries.

## **Credit risk management**

Credit risk is the risk of loss that a customer or counterparty is unable to or unwilling to meet its contractual obligations. Credit risk exists in the trading book and banking book, as well as from on- and off-balance sheet transactions of the Group. It arises principally from lending, trade finance and treasury businesses. The Chief Credit Officer, who reports directly to the CRO, takes charge of credit risk management and is also responsible for the control of credit risk exposures of subsidiaries in line with the credit risk management principles and requirements set by the Group.

For advances, different credit approval and control procedures are adopted according to the level of risk associated with the customer, counterparty or transaction. The Credit Risk Assessment Committee, comprising experts from credit and other functions, is responsible for making an independent assessment of material credit applications which require the approval of Deputy Chief Executives ("DCE") or above. Credit applications for non-retail exposures are independently reviewed and objectively assessed by risk management units. Obligor ratings (in terms of probability of default) and facility ratings (in terms of loss given default) are assigned to

these portfolios to support credit approval. Retail internal rating systems are deployed in the risk assessment of retail credit transactions, including small business retail exposures, residential mortgage loans, personal loans and credit cards. Loan grades, obligor and facility ratings as well as loss estimates (if applicable) are used to support credit approval.

The Group also uses loan grades, obligor ratings and loss estimates (if applicable) to support credit monitoring, reporting and analysis of credit risk information. For non-retail exposures, more frequent rating review and closer monitoring are required for higher-risk customers. For retail exposures, monthly updated internal ratings and loss estimates are used for credit monitoring on a portfolio basis. More comprehensive review is required for obligors being identified under high-risk pools. The Group adopts loan grading criteria which divides credit assets into five categories with reference to the HKMA's guidelines. The Risk Management Department ("RMD") provides regular credit management information reports and ad hoc reports to the Management Committee ("MC"), RC and Board of Directors to facilitate their continuous monitoring of credit risk. In addition, the Group identifies credit concentration risk by industry, geography, customer and counterparty. The Group monitors changes to counterparty credit risk, quality of the credit portfolio and credit risk concentrations, and reports regularly to the Group's Management.

The Group employs an internal master rating scale that can be mapped to Standard & Poor's external credit ratings. The structure of internal master rating scale is in compliance with the requirement of the Banking (Capital) Rules under the Hong Kong Banking Ordinance.

For investments in debt securities and securitisation assets, the obligor ratings or external credit ratings, assessment of the underlying assets and credit limits setting on customer/security issuer basis are used for managing credit risk associated with the investment. For derivatives, the Group sets customer limits to manage the credit risk involved and follows the same approval and control processes as applied for advances. On-going monitoring and stop-loss procedures are established. The methodology and assumptions used for impairment assessments are

# MANAGEMENT'S DISCUSSION AND ANALYSIS

reviewed regularly. In evaluating impairment of asset backed securities ("ABS") and mortgage backed securities ("MBS"), the Group continued to use a significant decline in market price and credit deterioration of the underlying assets to be the key indicators of impairment. The Group also considered other objective evidence of impairment, taking into account the impact of liquidity on market prices and the movement in loss coverage ratios of individual ABS and MBS held by the Group.

## Market risk management

Market risk refers to the risk of loss arising from movements in the value of foreign exchange, interest rate, equity and commodity positions held by the Group due to the volatility of financial market price (foreign exchange rate, interest rate, equity price, commodity price). The Group adopts a moderate market risk appetite to achieve a balance between risk and return. The Group's objective in managing market risk is to secure healthy growth of the treasury business, by effective management of potential market risk in the Group's business, according to the Group's overall risk appetite and strategy of treasury business on the basis of a well established risk management regime and related management measures.

In accordance with the Group's corporate governance principles in respect of risk management, the Board and RC, senior management and functional departments/units perform their duties and responsibilities to manage the Group's market risk. The RMD is mainly responsible for managing market risk, assisting senior management to perform their day-to-day duties, independently monitoring the market risk profile and compliance of management policies and limits of the Group and BOCHK, and ensuring that the aggregate and individual market risks are within acceptable levels.

The Group's market risk management covers BOCHK and its subsidiaries. The Group establishes consistent market risk management policies to regulate BOCHK's and subsidiaries' market risk management; meanwhile, the Group sets up the Group VAR and stress test limits, which are allocated and monitored across the Group, according to the subsidiaries' business requirements and risk tolerance levels. In line with the requirements set in the Group policy, the management of subsidiaries may,

subject to prior consent by BOCHK, formulate the detailed policies and procedures and are responsible for managing their daily market risk.

The Group sets up market risk indicators and limits to identify, measure, monitor and control market risk. Major risk indicators and limits include but are not limited to VAR, Stop Loss, Open Position, Stress Testing and Sensitivity Analysis (Basis Point Value, Greeks), etc. To meet management requirements, major risk indicators and limits are classified into four levels, and are approved by the RC, MC, CRO and the DCE in charge of the treasury business or the head of the respective business unit, respectively. Treasury business units of BOCHK and subsidiaries (as for Group Limit) are required to conduct their business within approved market risk indicators and limits.

The Group uses the VAR to measure and report general market risks to the RC and senior management on a periodic basis. The Group adopts a uniformed VAR calculation model, using a historical simulation approach and two years of historical market data, to calculate the VAR of the Group and subsidiaries over a one-day holding period with a 99% confidence level, and sets up the VAR limit of the Group and subsidiaries.

The Group adopts back-testing to measure the accuracy of VAR model results. The back-testing compares the calculated VAR figure of market risk positions of each business day with the actual and hypothetical revenues arising from those positions on the next business day. Generally speaking, the number of back-testing exceptions in a rolling 12-month period will not exceed four times, given a 99% confidence level.

## Interest rate risk management

Interest rate risk means the risks to a bank's earnings and economic value arising from movements in interest rate and term structures of the bank's asset and liability positions. The Group's interest rate risk exposures are mainly structural. The major types of interest rate risk from structural positions are:

- Repricing risk: mismatches in the maturity or repricing periods of assets and liabilities that may affect net interest income;

# MANAGEMENT'S DISCUSSION AND ANALYSIS

- Basis risk: different pricing basis for different transactions resulting that the yield on assets and cost of liabilities may change by different amounts within the same repricing period;
- Yield curve risk: non-parallel shifts in the yield curve that may have an adverse impact on net interest income or economic value; and
- Option risk: exercise of the options embedded in assets, liabilities or off-balance sheet items that can cause a change in the cash flows of assets and liabilities.

The Group's risk management framework applies also to interest rate risk management. The Asset and Liability Management Committee ("ALCO") exercises its oversight of interest rate risk in accordance with the "BOCHK Group Banking Book Interest Rate Risk Management Policy" approved by RC. RMD (Interest Rate and Liquidity Risk Management) is responsible for interest rate risk management. With the cooperation of the Asset and Liability Management Division of Financial Management Department and Investment Management, RMD assists the ALCO to perform day-to-day interest rate risk management. Its roles include, but are not limited to, the formulation of management policies, selection of methodologies, setting of risk indicators and limits, assessment of target balance sheet, monitoring of the compliance with policies and limits, and submission of interest rate risk management reports to the senior management and RC, etc.

The Group sets out interest rate risk indicators and limits to identify, measure, monitor and control interest rate risk. The indicators and limits include, but are not limited to, repricing gap limits, basis risk, duration, price value of a basis point ("PVBP"), Greeks, net interest income sensitivity ratio ("NII"), economic value sensitivity ratio ("EV"), etc. The indicators and limits are classified into different levels, which are approved by the CFO and CRO, ALCO, RC accordingly. Risk-taking business units are required to conduct their business within the boundary of the interest rate risk limits. Before launching a new product or business in the banking book, the relevant departments are required to go through a risk assessment

process, which includes the assessment of underlying interest rate risk and consideration of the adequacy of current risk monitoring mechanism. Any material impact on interest rate risk noted during the risk assessment process will be submitted to RC for approval.

NII and EV assess the impact of interest rate movement on the Group's net interest income and capital base. They are the Group's key interest rate risk indicators. The former assesses the impact of interest rate movement on net interest income as a percentage to the projected net interest income for the year. The latter assesses the impact of interest rate movement on economic value (i.e. the net present value of cash flows of assets, liabilities and off-balance sheet items discounted using market interest rate) as a percentage to the latest capital base. Limits are set by the RC on these two indicators to monitor and control the Group's banking book interest rate risk.

The Group uses scenario analyses and stress tests to assess the banking book interest rate risk that the Group would face under adverse circumstances. Scenario analyses and stress tests are also used to assess the impact on net interest income and economic value arising from the optionality of savings deposits, the prepayment of mortgage loans and the prepayment of debt securities with embedded options.

## Liquidity risk management

Liquidity risk is the risk that banks fail to provide sufficient funds to grow assets or pay due obligations, and need to bear an unacceptable loss. The Group maintains sound liquidity risk appetite to provide stable, reliable and adequate sources of cash to meet liquidity needs under normal circumstances or stressed scenarios; and to survive with net positive cumulative cash flow in extreme scenarios, without requesting the HKMA to act as the lender of last resort.

The Group's liquidity risk management objective is to effectively manage the liquidity of on- and off-balance sheet items with reasonable cost based on the liquidity risk appetite to achieve sound operation and sustainable profitability. Deposits from customers are the Group's primary source of funds. To ensure stable and sufficient source of funds are in place, the Group actively attracts

# MANAGEMENT'S DISCUSSION AND ANALYSIS

new deposits, keeps the core deposit and obtains supplementary funding from the interbank market and by issuing bills in the capital market. According to different term maturities and the results of funding needs estimated from stressed scenarios, the Group adjusts its asset structure (including loans, bonds investment, interbank placement, etc.) to maintain sufficient liquid assets which provides adequate funds in support of normal business needs and ensure its ability to raise funds at a reasonable cost to serve external claims in case of emergency. The Group is committed to diversify the source of funds and the use of funds to avoid excessive concentration of assets and liabilities and prevent triggering liquidity risk due to the break of funding strand when problem occurred in one concentrated funding source. The Group has established intra-group liquidity risk management guideline to manage the liquidity funding among different entities within the Group, and to restrict their reliance of funding on each other. The Group also pays attention to manage liquidity risk created by off-balance sheet activities, such as loan commitments, derivatives, options and other complex structured products. The Group has an overall liquidity risk management strategy to cover the liquidity management of foreign currency assets and liabilities, collateral, intra-day liquidity, intra-group liquidity, the liquidity risk arising from other risks, etc., and has formulated corresponding contingency plan.

The RC is the decision-making authority of liquidity risk management, and assumes the ultimate responsibility of liquidity risk management. As authorised by RC, ALCO exercises its oversight of liquidity risk and ensures the daily operations of the Group are in accordance with risk appetite and policies as set by RC. RMD (Interest Rate and Liquidity Risk Management) is responsible for overseeing the Group's liquidity risk. It cooperates with the Asset and Liability Management Division of Financial Management Department, Investment Management, etc. to assist the ALCO to perform liquidity management functions according to their specific responsibilities.

The Group established liquidity risk management indicators and limits to identify, measure, monitor and control liquidity risk on daily basis. These indicators and limits include, but are not limited to LCR, loan

to deposit ratio, Maximum Cumulative Cash Outflow ("MCO") and liquidity cushion. The Group applies cash flow analysis to assess the Group's liquidity condition under normal conditions and also performs a liquidity stress test (including institution specific, general market crisis and combined crisis) and other methods at least on monthly basis to assess the Group's capability to withstand various severe liquidity crises. Also, relevant management information systems such as Assets and Liabilities Management System and Basel Liquidity Ratio Management System are developed to provide data and the preparation for regular management reports to facilitate liquidity risk management duties.

In accordance with the requirements of Supervisory Policy Manual LM-2 "Sound Systems and controls for Liquidity Risk Management" issued by the HKMA in 2011, the Group has implemented behaviour model and assumptions of cash flow analysis and stress test to enhance the Group's cash flow analysis under both normal and stressed conditions. In cash flow analysis under normal circumstances, assumptions have been made relating to on-balance sheet items (such as deposits from customers) and off-balance sheet items (such as loan commitments). According to various characteristics of the assets, liabilities and off-balance sheet items, the Group forecasts the future cash flow based on contractual maturity date and the assumptions of customer behaviour and balance sheet changes. The Group establishes MCO indicator which predicts the future 30 days maximum cumulative net cash outflow in normal situations based on the above assumptions, to assess if the Group has sufficient financing capacity to meet the cash flow gap in order to achieve the objective of continuing operation.

In the liquidity stress test, institution specific, general market crisis and combined crisis scenarios have been set up, combined crisis scenario is a combination of institution specific and general market crisis to assess the Group's capability to withstand a more severe liquidity crisis, with a more stringent set of assumptions being adopted. Stress test assumptions include the run-off rate of retail, wholesale and interbank deposits; drawdown rate of loan commitments and trade-related contingent liabilities; delinquency ratio and rollover rate of customer loans; and

# MANAGEMENT'S DISCUSSION AND ANALYSIS

haircut of interbank placement and marketable securities. As at 30 June 2016, the Group was able to maintain a net cash inflow under the three stressed scenarios, indicating the Group has the ability to meet financing needs under stressed conditions. In addition, the Group has a policy in place to maintain a liquidity cushion which includes high quality or comparable quality marketable securities issued or guaranteed by sovereigns, central banks, public sector entities or multilateral development banks with 0% or 20% risk weight or marketable securities issued by non-financial corporate with a corresponding external credit rating of A- or above to ensure funding needs even under stressed scenarios. A contingency plan is being established which details the conditions to trigger the plan based on stress test results and early warning indicators, the action plans and relevant procedures and responsibility of relevant departments.

The LCR is calculated in accordance with the Banking (Liquidity) Rules effective from 1 January 2015, the Group, being classified as category 1 authorised institution by the HKMA, is required to calculate LCR on consolidated basis. During the year of 2016, the Group is required to maintain a LCR not less than 70%.

In certain derivative contracts, the counterparties have right to request from the Group additional collateral if they have concerns about the Group's creditworthiness.

The Group's liquidity risk management also covers new products or business developments. Before launching a new product or business, the relevant departments are required to go through a risk assessment process, which includes the assessment of underlying liquidity risk and consideration of the adequacy of the current risk management mechanism. Any material impact on liquidity risk noted during the risk assessment process will be reported to RC for approval.

The Group has established a set of uniform liquidity risk management policies which serve as standards and guidance to all the Group's members for liquidity risk management. On the basis of the Group's uniform policy, each of the subsidiaries develops its own liquidity management policies according to its own characteristics,

and assumes its own liquidity risk management responsibility. Subsidiaries are required to report their respective liquidity positions on a regular basis to RMD (Interest Rate and Liquidity Risk Management) of BOCHK, which consolidates this information and evaluates group-wide liquidity risk.

## **Operational risk management**

Operational risk is the risk of loss resulting from inadequate or failed internal process, people and system, or from external events. The risk is inherent in every aspect of business operations and confronted by the Group in its day-to-day operational activities.

The Group has implemented the "Three Lines of Defence" for its operational risk management. All departments or functional units as the first line of defence are the first parties responsible for operational risk management, and carry out the duties and functions of self risk control in the process of business operation through self assessment and self enhancement. The Legal & Compliance and Operational Risk Management Department ("LCO"), together with certain specialist functional units in relation to operational risk management within the Group, including the Human Resources Department, Information Technology Department, Corporate Services Department, Financial Crime Compliance Department, Financial Management Department and General Accounting & Accounting Policy Department (collectively known as "specialist functional units"), are the second line of defence. They are responsible for assessing and monitoring the operational risk conditions in the first line of defence, and providing them with guidance. The LCO, being independent from the business units, is responsible for assisting the Management in managing the Group's operational risk, including the establishment and review of the operational risk management policy and framework, designing the operational risk management tools and reporting mechanism, and assessing and reporting the overall operational risk position to the Management and RC. Specialist functional units are required to carry out their managerial duties of the second line of defence with respect to some specific aspects of operational risk and its related issues. Besides taking charge of operational risk management in their

# MANAGEMENT'S DISCUSSION AND ANALYSIS

own units, these units are also required to provide other units with professional advice/training in respect of certain operational risk categories and to lead the group-wide operational risk management. Group Audit is the third line of defence which provides independent assessment to the effectiveness and adequacy of the operational risk management framework and is required to conduct periodic audit of the operational risk management activities of various departments or functional units within the Group regarding their compliance and effectiveness and to put forward recommendations for remedial actions.

The Group has put in place an effective internal control process which requires the establishment of policies and control procedures for all the key activities. The Group adheres to the fundamental principle of proper segregation of duties and authorisation. The Group adopts various operational risk management tools or methodologies such as key risk indicators, self-assessment, operational risk events reporting and review to identify, assess, monitor and control the risks inherent in business activities and products, as well as purchase of insurance to mitigate unforeseeable operational risks. Business continuity plans are established to support business operations in the event of an emergency or disaster. Adequate backup facilities are maintained and periodic drills are conducted.

## **Reputation risk management**

Reputation risk is the risk that negative publicity about the Group's business practices, whether genuine or not, will cause a potential decline in the customer base, or lead to costly litigation or revenue decrease. Reputation risk is inherent in other types of risk and every aspect of business operation and covers a wide spectrum of issues.

In order to mitigate reputation risk, the Group has formulated and duly followed its Reputation Risk Management Policy. The policy aims to identify and prevent reputation risk proactively at an early stage when an incident occurs. Since reputation risk is often caused by various types of operational and strategic issues that negatively impact the trust and perception of the

Group, all operational and key risks identified are assessed through the established Key Control Self-Assessment framework, including risk assessment tools, to evaluate the severity of their impact on the Group, including the damage to reputation.

In addition, the Group has put in place a comprehensive framework to continuously monitor reputation risk incidents in the financial industry. This continuous monitoring enables the Group to effectively manage, control and mitigate any potential adverse impact from an incident. The Group also adopts robust disclosure practices to keep our stakeholders informed at all times, which helps build confidence in the Group and establish a strong public image.

## **Legal and compliance risk management**

Legal risk is the risk that unenforceable contracts, lawsuits or adverse judgments may disrupt or otherwise negatively affect the operations or financial conditions of the Group. Compliance risk is the risk of legal or regulatory sanctions, financial losses or losses in reputation the Group may suffer as a result of its failure to comply with applicable laws and regulations. Legal and compliance risks are managed by the LCO, which reports directly to the CRO. As part of the Group's corporate governance framework, the policy for the management of legal and compliance risks is approved by the RC as delegated by the Board.

## **Strategic risk management**

Strategic risk generally refers to the risks that may cause current or future negative impacts on the earnings, or capital or reputation or market position of the Group because of poor business decisions, improper implementation of strategies and inadequacies in the response to the changing market condition. The Board reviews and approves the strategic risk management policy. Key strategic issues have to be fully evaluated and properly endorsed by the senior management and the Board.

The Group regularly reviews its business strategies to cope with the latest market situation and developments.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## Capital management

The major objective of the Group's capital management is to maximise total shareholders' return while maintaining a capital adequacy position in relation to the Group's overall risk profile. The ALCO periodically reviews the Group's capital structure and adjusts the capital mix where appropriate to maintain an optimal balance among risk, return and capital adequacy.

To comply with the HKMA's requirements as stated in the Supervisory Policy Manual "Supervisory Review Process", the Group adopts the internal capital adequacy assessment process ("ICAAP") and reviews it annually. Based on the HKMA's guidelines on Pillar II, ICAAP has been initiated to assess the extra capital needed to cover the material risks not captured or not adequately captured under Pillar I, and therefore minimum Common Equity Tier 1 capital ratio, minimum Tier 1 capital ratio and minimum Total capital ratio are determined. Meanwhile, operating ranges for the aforementioned capital ratios have also been established which enable the flexibility for future business growth and efficiency of capital utilisation.

## Stress testing

The Group supplements the analysis of various types of risks with stress testing. Stress testing is a risk management tool for estimating risk exposures under stressed conditions arising from extreme but plausible market or macroeconomic movements. These tests are conducted on a regular basis by the Group's various risk management units in accordance with the principles stated in the Supervisory Policy Manual "Stress-testing" published by the HKMA. The ALCO monitors the results against the key risk limits approved by the RC. The Financial Management Department reports the combined stress test results of the Group to the Board and RC regularly.

## BOC Life

BOC Life's principal business is the underwriting of long-term insurance business in life and annuity (Class A), linked long term business (Class C), permanent health (Class D), retirement scheme management category I

(Class G) and retirement scheme management category III (Class I) in Hong Kong. Major types of risk arising from BOC Life's insurance business are insurance risk, interest rate risk, liquidity risk, credit risk, equity price risk and currency risk. BOC Life closely monitors these risks and reports to its Risk Management Committee on a regular basis. The key risks of its insurance business and related risk control process are as follows:

## Insurance risk management

BOC Life is in the business of insuring against the risk of mortality, morbidity, disability, critical illness, accidents and related risks. These risks are managed through the application of underwriting policies and reinsurance arrangements.

The underwriting strategy is intended to set premium pricing at an appropriate level that corresponds with the underlying exposure of the risks underwritten. Screening processes, such as the review of health condition and family medical history, are also included in BOC Life's underwriting procedures.

The reinsurance arrangement helps transfer the insurance risk associated with the insurance contracts to the third party. It does not, however, discharge BOC Life's liability as the primary insurer. If a reinsurer fails to pay a claim for any reasons, BOC Life remains liable for the payment to the policyholder. The creditworthiness of reinsurers is considered by reviewing the reinsurers' financial strength prior to finalisation of any reinsurance contract. BOC Life directs its reinsurance placement policy and assesses the creditworthiness of all reinsurers and intermediaries by reviewing credit grades provided by rating agencies and other publicly available financial information. BOC Life also monitors the reinsurance counterparty risk exposure on an ongoing basis. It maintains records of the payment history for significant contract holders, with whom it conducts regular business.

For details of the Group's Insurance Risk Management, please refer to Note 3.4 to the Interim Financial Information.

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## Interest rate risk management

An increase in interest rates may result in the depreciation of the value of BOC Life's investment assets. It might induce in customers surrender. A decrease in interest rates may result in an increase in insurance liability and an inability to adequately match guarantees or lower returns leading to customer dissatisfaction. BOC Life manages the matching of assets and liabilities of its portfolios within an asset liability management framework that has been developed to achieve investment returns that match its obligations under insurance contracts; and to manage the adverse impact due to interest rate movement.

## Liquidity risk management

Liquidity risk is the risk of not being able to meet obligations as they fall due without incurring unacceptable loss. BOC Life's asset and liability management framework includes cash flow management to preserve liquidity to match policy payout from time to time.

## Credit risk management

BOC Life has exposure to credit risk that a customer, debtor or counterparty will be unable to or unwilling to meet a commitment that they have entered into. Key areas to which BOC Life's insurance business is exposed include:

- Default risk associated with bonds, notes and counterparties
- Credit spread widening as a result of credit migration (downgrade)

- Reinsurers' share of insurance unpaid liabilities
- Amounts due from reinsurers in respect of claims already paid
- Amounts due from insurance contract holders
- Amounts due from insurance intermediaries

BOC Life manages credit risk by placing limits on its exposure to each investment counterparty and issuer. Such limits are subject to review by the Management at least once a year.

In order to enhance its credit risk management, BOC Life has strengthened its communication with the Group while closely monitoring and updating internal control to ensure consistency with the Group's credit risk management and investment strategy.

## Equity price risk management

Equity price risk refers to the risk of loss due to volatility of market price in listed equity securities and equity funds. BOC Life's asset and liability framework includes managing the adverse impact due to equity price movement through stress test and exposure limit.

## Currency risk management

Currency risk refers to the risk of loss due to volatility of exchange rate. BOC Life's asset and liability framework includes managing the adverse impact due to exchange rate movement through stress test, exposure limit and risk limit.